



**TESTIMONY OF CHARLES HARAK, ESQ.
REGARDING DOE'S APPLIANCE EFFICIENCY STANDARD PROGRAM
Before the House Committee on Energy and Commerce
May 1, 2007**

My name is Charles Harak. I am the Senior Attorney for the energy project at the National Consumer Law Center ("NCLC"). For most of my 30 years as a lawyer, I have worked on behalf of low-income consumers and consumer groups to help make their energy bills more affordable and to assist in the development and implementation of low-income energy efficiency programs. Prior to joining NCLC in 2001, I worked for the Massachusetts Attorney General's office on various matters involving regulated electric and gas utilities as well as on automobile, health and life insurance matters. I also worked for many years at the Massachusetts Law Reform Institute on low-income energy and housing matters.

The primary purposes of my testimony are to underscore the importance to low-income consumers of adopting strong appliance efficiency standards, particularly for boilers and furnaces, and to highlight areas where I think the Department of Energy ("DOE") could do better in carrying out the Congressional mandates regarding those standards.

I. IMPORTANCE OF STANDARDS TO LOW-INCOME CONSUMERS

A. Energy Burdens on Low-Income Households

Low-income households in America struggle to pay their energy bills, as they do with all of their bills for necessities.¹ Households eligible for the federal Low-Income Home Energy

¹ The Census Bureau calculates that as of 2005, 12.7% of all American households were living below the federal poverty level. U.S. Census Bureau, Current Population Reports, P60-231, "Income, Poverty and Health Insurance Coverage in the United States: 2005" (U.S. G.P.O. 2006). Many experts in poverty analysis consider the defined poverty level too low. Many more households than the Census Bureau defines as living in poverty struggle to afford the basic necessities of life.

Assistance Program are projected to spend an average of \$1750 on their home energy bills in 2007. Households that heat with propane or heating oil are projected to spend much higher amounts, between \$2300 and \$2700:²

Primary heat fuel is >>>	Natural gas	Propane	Heating Oil	Electricity	All (average)
Projected 07 cost is >>>	\$1,832	\$2,311	\$2,714	\$1,344	\$1,751

When energy bills are compared to household income, households living in poverty spend 25% of their total income on their energy bills.³

Heating costs can place particularly onerous burdens on low-income families. To choose my state, Massachusetts, as an example, the state heating oil association estimates that oil-heat customers need 800 to 900 gallons to get through the winter. Massachusetts heating oil prices averaged \$2.40 per gallon this past winter, and oil-heat households spent an average of \$2,000 on heating bills alone. Those who use natural gas for heat, the predominant heating fuel in most other regions of the country, paid somewhat less to keep their homes warm, depending on where they live, but those gas bills were still large and represented a very significant percentage of total household income.

B. Large Potential for Energy Savings in Low-Income Households

Investments in improving the energy efficiency of low-income housing clearly pay off. A recent study shows that low-income households whose homes have been weatherized spent \$325 (gas-heated homes) to \$350 (oil- or propane-heated homes) less for their annual heating

² Economic Opportunity Studies, "Forecast FY 2007 Energy Bills and Heating Bills," available at http://www.opportunitystudies.org/repository/File/low-income/Eisenberg%20Oct%20Projections%20_2_.pdf

³ Dr. Meg Power, "FY 2006 Energy Bills Forecast: The Impact on Low-Income Consumers" (2006), p. 4, Fig. 4 available at <http://www.opportunitystudies.org/repository/File/weatherization/outlook-feb-06.pdf>.

bills than those which were not weatherized.⁴ Increasing the efficiency standards for residential furnaces and boilers can also yield significant savings, especially in low-income households where the typical system is, on average, older and far less likely to be performing even at its rated efficiency.

C. Split Incentives (Owner -Tenant)

It is important to keep in mind that low-income households are disproportionately renters, when thinking about standards for boilers, furnaces, and other household appliances, and how they impact low-income households. Renters in most circumstances are prohibited from replacing large household appliances, such as furnaces, boilers and water heaters. Property owners almost always make the decisions as to when to replace a furnace or boiler, and what type of system to install. In the absence of rigorous appliance standards, the property owners will often install less expensive and less efficient appliances because the tenants, not the owners, bear the higher energy costs of operating less efficient appliances.

Among low-income households, 60% to 70% are renters, while among households at or above the poverty level the numbers are almost reversed: approximately 70% of non-poor households own their own homes.⁵ There is no question that low-income households are disproportionately represented in rental housing. According to the 2000 U.S. Census, median income in owner occupied housing was \$51,323, almost double the median income in rental housing of \$27,362. According to DOE's 2001 Residential Energy Consumption Survey

⁴ Dr. Meg Power, "Low-Income Consumers' Energy bills and Energy Savings in 2003 and FY 2004" (2004), available at <http://www.opportunitystudies.org/repository/File/weatherization/low-income-cons-energy-bills-2003-and-2004.pdf>.

⁵ In DOE's rulemaking docket to revise the efficiency standards for central air conditioners, several parties submitted comments regarding the homeownership rates of poor versus non-poor households. On October 10, 2001, the Environmental Protection Agency submitted comments noting that 60% of households living in poverty were renters, versus only 27% of non-poor households. The Massachusetts Union of Public Housing Tenants submitted comments on October 2, 2001 noting that 59% of all Massachusetts households (poor and non-poor combined) owned their homes, while only 28% of households at or below 30% of state median income owned their homes (72% were renters).

(“RECS”), only 4.6% of owner-occupants were below the Federal Poverty Level (“FPL”), while fully one-quarter (25.8%) of renters had incomes at or below the FPL.

Owner-occupants have the incentive to weigh the lower initial purchase cost of a lower-efficiency furnace against the higher long-term operating costs. Owners of rental property, however, see only the incentive of lower purchase costs because the operating costs are generally borne by the tenants.

This so-called “split incentive” between property owners and tenants must inform Congressional and DOE policy regarding energy efficiency standards. In most situations, it would be illegal for a tenant to replace the heating system as tenants simply do not have the right to make major alterations to the owner’s property. In most states, it is clearly the owner’s legal responsibility to provide an operating heating system, and to maintain or replace it when necessary.⁶

The barriers that low-income families face in obtaining energy-efficient living space and heating systems are alluded to in the authorizing legislation that created DOE’s Weatherization Assistance Program (“WAP”), both in Congress’s initial findings and the mandate to ensure that the benefits from any weatherization work flow through to renters:

Congress finds that -

(1) a fast, cost-effective, and environmentally sound way to prevent future energy shortages in the United States while reducing the Nation’s dependence on imported energy supplies, is to encourage and facilitate, through major programs, the implementation of energy conservation . . . with respect to dwelling units;

(2) existing efforts to encourage and facilitate such measures are inadequate because -
(A) *many dwellings owned or occupied by low-income persons are energy inefficient;*

⁶ In some states, it is also the owner’s responsibility to provide and maintain such major appliances as water heaters and cooking stoves.

(B) low-income persons can least afford to make the modifications necessary to provide for energy efficient equipment in such dwellings

42 U.S.C. § 6861(a) (emphasis added).

. . . .

(5) In any case in which a dwelling consists of a rental unit or rental units, the State . . . shall ensure that -

(A) the benefits of weatherization assistance in connection with such rental units, including where the tenants pay for their energy through their rent, will accrue primarily to the low-income tenants residing in such units . . .

42 U.S.C. § 6863(b)(5) (emphasis added).

Congress and DOE should be taking an aggressive approach when it comes to setting efficiency standards for boilers, furnaces, and other major appliances that are generally maintained and replaced by property owners, because the rental market is flawed and does not send appropriate price signals to all players in that market.

While it is important to be aware of this problem of split incentives, federally-mandated efficiency standards are also important for homeowners and for attaining the statutory goal of reduced energy savings. There are many other barriers to achieving energy savings that standards help to overcome. Many purchasers buy new appliances not after a careful review of available options, but on very short notice, when the existing appliance fails. This may be particularly true of boilers and furnaces. Comparative information about product efficiency may be difficult or time consuming to obtain. Consumers may not fully consider or understand the impact that rising energy prices will have on their total costs (initial purchase plus operating costs) over the life of the unit. For these and other reasons, setting appliance efficiency standards are important for all consumers, not just tenants.

D. Potential National Energy Savings Are Significant and Will Moderate Prices for Low-Income Households

The American Council for an Energy-Efficient Economy (“ACEE”) projects that the adoption of a 90% AFUE standard for residential gas furnaces would save about 2.8 billion therms of natural gas through 2030, compared to DOE’s proposed standard of 80% AFUE.⁷ This amount of saved energy is one-third greater than all of the natural gas consumed by residential households in the state of Pennsylvania during 2006.⁸

In addition, savings resulting from adoption of stronger boiler and furnace standards would have a measurable impact on the overall national demand for natural gas, thus moderating expected future increases in the price of natural gas. While various studies differ on the exact magnitude of those price effects, there is a consensus that increases in boiler and furnace efficiency standards will beneficially impact the price of natural gas.⁹ Low-income households in particular benefit from any moderation in the price of natural gas because they already pay a disproportionate percentage of their income for home energy bills and often face termination of their service due to non-payment. To the extent that stronger standards for furnaces and boilers are adopted, this will make natural gas a little more affordable for these households and help them stay connected to the gas supply system.

II. SUGGESTIONS FOR IMPROVEMENT IN THE CURRENT SYSTEM

The Committee is no doubt well aware of DOE’s checkered history in implementing the Energy Policy and Conservation Act. In the two reported cases involving DOE’s implementation of energy efficiency standards, courts have held that DOE illegally attempted to

⁷ <http://www.standardsasap.org/statesavings.pdf>.

⁸ Total residential consumption in Pennsylvania was 206,985 million cubic feet. http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_SPA_a.htm. There are approximately 10.2 therms per thousand cubic feet (mcf), with the result that the Pennsylvania residential consumption was 2,111 million therms in 2006.

⁹ See “Comments of the Natural Resources Defense Council” in DOE furnace/boiler docket EE-RM/STD 01-350, pp. 4 – 11 (comments filed Jan. 15, 2007).

roll back a standard for central air conditioners (NRDC v. Abraham, 355 F.3d 179 (2nd Cir. 2004)) and that DOE refused to adopt any standards at all, when it was in fact required to adopt standards (NRDC v. Herrington, 768 F.2d 1355 (D.C. Cir. 1985)). More recently, Congress has required DOE to report on its failures to timely adopt or revise various energy efficiency standards (P. L. 109-58, § 141, 119 Stat. 594, 648), and DOE has settled litigation alleging that it illegally failed to adopt and revise energy efficiency standards in accordance with Congressionally-mandated deadlines (State of New York v. Bodman/NRDC v. Bodman, Nos. 05 Civ. 7807/05 Civ. 7808 (SD.N.Y.)(consent decree filed Nov. 6, 2006)).

From the perspective of low-income consumers, the most important improvement that Congress could make in the current regulatory system is to provide DOE with clear authority, if not an out-and-out mandate, to adopt standards for products that vary by climate region, if the cost-effectiveness of higher efficiency standards in fact varies by zone or region. This is true for products such as furnaces, boilers and central air conditioners. Numerous parties (state energy agencies and regulators, environmental groups, low-income consumer groups, etc.) in the pending DOE docket on standards for residential furnaces and boilers (EE-RM/STD 01-350) have been urging DOE to adopt a two-tiered standard for residential gas-fired furnaces. There is a virtually complete consensus among all interested parties and stakeholders that a 90% AFUE standard is technologically feasible as well as economically justified in 30 or more northern, colder states.¹⁰ DOE, however, flatly refuses to consider a two-tiered standard. DOE cites the definition of “energy conservation standard” in 42 U.S.C. § 6291 (6) as tying its hands from doing so, without offering any legal analysis of this conclusion, even though that conclusion

¹⁰ There is not a consensus as to whether the 90% AFUE standard makes economic sense in more southern and warmer states, although there is certainly evidence to support that conclusion.

seriously impedes the Congressional goal of attaining all energy savings that are economically justified.

NCLC, joined by numerous other groups¹¹, presented DOE with a lengthy and detailed legal analysis of why it in fact has the authority under existing law to adopt a two-tiered standard for furnaces.¹² NCLC, this time joined by four state energy agencies, Dow Chemical Company, and six national/regional associations, also sent a letter to DOE Sec. Bodman urging him to pay personal attention to the furnace rulemaking docket, and particularly to the agency's position in that docket that it cannot adopt a two-tiered standard for gas furnaces.¹³ At the moment, it appears that DOE does not intend to change its position that it is prohibited from adopting a two-tiered standard, based on its interpretation of the definition of "energy conservation standard" in the Energy Policy and Conservation Act ("EPCA").

In this context, Congress should carefully consider whether further legislation is needed to overcome this unfortunate obstacle to the attainment of cost-effective energy savings. DOE itself estimates that there would be substantial energy savings of 1.83 quads over the next many years from adopting "regional performance standards for non-weatherized gas furnaces," as noted in revised data published by DOE in the February 9, 2007 Federal Register (72 Fed. Reg. 6184 – 6186). These savings represent almost 2% of all of the energy consumed in the United States in one year. To the extent that the only barrier that keeps DOE from adopting a two-tiered standard for gas furnaces is its interpretation of the definition of "energy conservation standards," Congress could easily remove that barrier. To the extent that Congress wishes to

¹¹ The other parties include the Consumer Federation of America, Massachusetts Energy Consumers Alliance, Massachusetts Union of Public Housing Tenants, National Association of State Community Service Programs, Ohio Partners for Affordable Energy, People's Power & Light of Rhode Island, Public Utility Law Project (NY), Salt Lake City Community Action Program, Texas Legal Services Center, Texas Ratepayers' Organization to Save Energy, The Energy Project (WA), The Utility Reform Network (CA), and the Virginia Citizens Consumer Council.

¹² A copy of the relevant portion of the January 12, 2007 Comments of NCLC et al. in DOE docket EE-RM/STD 01-350 are attached to this testimony. The legal discussion appeared on pp. 10 – 17 of those comments.

¹³ The letter to Sec. Bodman is also attached to this testimony.

clarify more broadly that DOE can adopt regional standards for any product where this would best carry out Congressional intent to increase appliance efficiency, NCLC attaches to this testimony proposed legislative changes.

Congress should also consider mandating that DOE address the issue of regional standards for furnaces promptly, perhaps within 18 months of any EPCA amendments that may be enacted. It appears that DOE simply will not consider a two-tiered standard for furnaces in the pending boiler-furnace rulemaking docket. Unless Congress were to mandate that DOE immediately revisit furnace standards, DOE may not re-address this issue for another 10 or more years. Given that the existing DOE record has all of the technical and economic information it would need to decide whether and how to implement a two-tiered furnace standard, Congress should set an expeditious deadline for DOE doing so.

III. CONCLUSION

NCLC appreciates the opportunity the Committee has provided by inviting us to testify on the appliance efficiency standards program. We hope that the Committee will seriously consider clarifying existing law so that DOE will have no doubt that it in fact can adopt regional standards for covered products.

SUMMARY OF TESTIMONY OF CHARLES HARAK

Strong appliance efficiency standards, especially for boilers and furnaces, are extremely important for low-income households. Households living at or below the federal poverty level now spend approximately 25% of total household income on energy bills. Yet there is the potential to significantly reduce those bills through adoption of stronger furnace standards.

Low-income households are disproportionately renters not owners: 60% to 70% of low-income families are renters. Rental housing raises the “split incentive” problem – the owner has the incentive to purchase less-expensive, less-efficient appliances because owners do not have the incentive to minimize energy costs over the life of the appliance. Tenants generally pay for those energy bills. This split incentive problem must shape Congressional and DOE policy regarding appliance standards. But strong standards are also very important for homeowner purchases as well, if we are to attain the statutory goal of achieving all economically-feasible energy savings.

In order to improve the current system, Congress should provide DOE with statutory authority, if not an out-and-out mandate, to adopt standards for appliances that vary by region or zone, when the cost-effectiveness of higher standards varies by region (e.g., for furnace, boilers, central air conditioners). DOE has taken the position that it cannot adopt regional standards, even though it is not clearly precluded by statute from doing so. Congress must remove any ambiguity, and adopt language that unquestionably gives DOE the authority to adopt regional standards. In addition, Congress should consider setting a prompt deadline for DOE doing so.